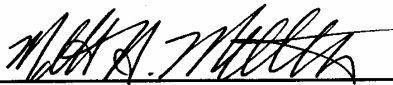


**Memorandum of Understanding Between Research Operations Department
and the Defense Programs Division for Manipulator Repairs within the Defense
Programs Facilities**

Prepared By:

Date

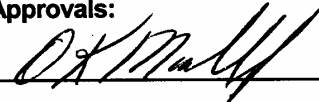


1/12/06

M. H. Melton, ROD Mechanical Maintenance Manager

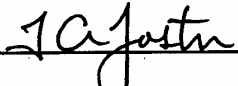
Approvals:

Date



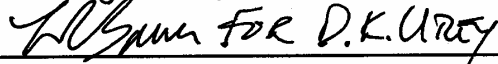
1/12/06

O. K. Morrell Jr., Maintenance Manager, Defense Programs Div.



1/12/06

T. A. Foster, Chief Engineer, Defense Programs Div.



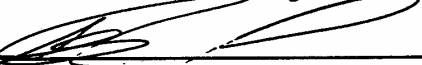
01/12/2006

D. K. Utley, Operations Manager, Defense Programs Div.



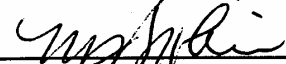
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D. P. Potocik, RCO Manager, Defense Programs Div.




1/12/06

S. E. Booth, TEF Startup Manager, Defense Programs Div.



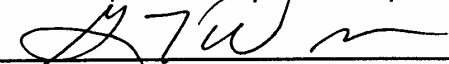
1/20/06

C. G. Spencer, Business Unit Director, Defense Programs Div.



1/17/06

M. J. Swain, Research Operations Department Manager



1/23/06

G. T. Wright, Business Unit Director, SRNL

CGS 1/17/06

Memorandum of Understanding (U)

1.0 PURPOSE

This memorandum of understanding defines the responsibilities of Research Operations Department (ROD) and Defense Programs (DP) personnel for the maintenance, inspection, testing, and operation of manipulators and related systems owned by DP and located within the Defense Programs facilities. ROD and DP are different business units within the Washington Savannah River Company (WSRC). This document defines the interface between these organizations to ensure that manipulator systems are maintained in Defense Programs facilities.

2.0 SCOPE

The systems affected by this document include manipulators which are owned and operated by DP personnel and maintained by ROD within the Defense Programs Facilities. This document defines the interfaces for all activities involving manipulator systems and components including but not limited to operation, maintenance, lockouts, testing, overhauls, and inspections. WSRC Manual 1Y 8.20 is the governing site document for maintenance at the Savannah River Site (SRS) and defines the responsibilities of all site organizations involved in facility maintenance. Where conflicts occur between WSRC 1Y 8.20 and this memorandum, the more stringent requirement shall apply.

2.1 Boundaries

Defense Programs Facility Management is the owner of all manipulators and associated support equipment within the facility buildings. All manipulator systems and components that relate to and/or affect Defense Programs Facilities will be maintained, tested, and inspected by ROD personnel in accordance with conduct of maintenance requirements as described in Manual 1Y procedure 8.20.

The manipulator systems are to be maintained by ROD and TMO personnel. TMO will provide electrical maintenance assistance for the manipulator systems and monthly oil inspection. ROD will perform all mechanical maintenance for the manipulator systems.

3.0 TERMS AND DEFINITIONS

N/A

4.0 EQUIPMENT DESCRIPTION

Master slave manipulator systems:

CLI# H-264002-CMT-MSM-7513
CLI# H-264002-CMT-MSM-7514

5.0 RESPONSIBILITIES

Note: All ROD support personnel shall obtain the proper work authorization through the Work Management Center and Central Control Room (CCR) prior to commencing work activities.

5.1 Defense Programs Facility Management/Operations/Maintenance Organization

1. **Perform** lockouts of manipulator systems and power supply circuits when required for maintenance.
2. **Provide** facility-specific training to ROD personnel as appropriate and necessary.
3. **Provide** an approved work package for ROD personnel to perform maintenance work on manipulator systems within the Defense Programs Facilities commensurate with the scope of work in accordance with Manual 1Y procedure 8.20.
4. **Perform** the Safe-Energy-State (SES) and absence of voltage checks on equipment prior to work and provide support by a Qualified Electrical Worker (QEW) on an as-needed basis for ROD personnel.

All work will be performed using sound conduct of maintenance practices as outlined in Manual 8Q procedure 32 and Manual 18Q Procedure 2.

5. **Provide** rigging support for installation/removal of equipment on an as-needed basis for ROD personnel.

5.2 Defense Programs Engineering

1. **Perform** Unreviewed Safety Question Determinations (USQD) or appropriate engineering and technical reviews for work packages as required.
2. **Specify** Post Maintenance Test requirements for work packages as required.
3. **Review** completed test procedures and/or work packages as required.

5.3 Defense Programs Radiological Control Operations

1. **Provide** the Radiological Control Operations support necessary to maintain, operate, and test manipulators and associated support equipment.
2. **Perform** radiological surveys of equipment/components and establish necessary controls to protect workers, the public, and the environment from radiation and radioactive materials.

5.4 The Research Operations Department (ROD)

1. **Provide** requested inspections, maintenance, and testing of manipulators and associated support systems.

All work will be performed using sound conduct of maintenance practices as outlined in Manual 1Y Procedure 8.20 to include timely closure and recording of detailed work histories in the site Computer Maintenance Management System (Passport).

2. **Train** appropriate personnel on the operation and maintenance of the Tritium Facility manipulator systems.
3. **Ensure** that all personnel are trained as Level II Radiological Workers prior to assignment to Defense Program Facilities.
4. **Perform** radiological surveys on repaired equipment and/or components prior to return to the Tritium Facilities and provide survey results as required.
5. **Generate** an approved work package for ROD personnel to perform maintenance work on manipulators within the SRNL commensurate with the scope of work in accordance with Manual 1Y procedure 8.20.
6. **Provide** a copy of all records and documentation generated to Defense Programs WMC personnel and the Design Authority Engineer (DAE).
7. **Notify** the TEF Shift Manager (SM) in the 264-H Control Room immediately for an emergency or unplanned Incident or condition after ensuring the safety of personnel and placing the work area in a safe state.

6.0 CONTROL OF ACTIVITIES

Lockout of Defense Programs equipment shall be handled under WSRC 8Q, Procedure 32 and applicable Defense Programs clarifications.

Troubleshooting and maintenance performed on any Defense Programs equipment shall be controlled in accordance with WSRC 1Y, WSRC E7, and Defense Programs procedures.

Each facility will evaluate the work request against operational needs and provide an optimum performance window date. Emergent or high priority work requests will be integrated into the schedules based on a mutually agreed upon date. The desired method is to upload from Passport to Primavera (P3) and download from Primavera (P3) back to Passport.